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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/228,325
Filing Date: January 11, 1999
Appellant(s): STEVENS, LARRY

Richard Gilmore
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/28/08 appealing from the Office action mailed 2/9/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying related appeals is contained in the brief.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The statement of the status of amendments contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner believes the appellant's statement of the grounds of rejection to be reviewed on appeal is incorrect. The examiner believes the underlying ground of rejection to be reviewed is whether a patent should be granted for merely following the installation directions of the adhesive material since nothing new/non-obvious has been created. But in order to move this case along, the examiner will address the applicant's arguments.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Document ID	Name	Patent number/date	Notes
Applicant's specification	Stevens	09/228325	
US Patent	Chung	US 6,056,622	
US Patent	Hankele	US 3,809,401	
US Patent	Skedelski et al	US 4,792,316	
US Patent	Skedelski et al	US 4,955,314	
US Patent	Hynning et al	US 5,839,982	
NPL	Dow Corning	Q3-6093 Data Sheet	
NPL	GE Preliminary Product Data sheet	D1-SEA 210 Data Sheet	
NPL	Ichemo	Data Sheet	

(9) Grounds of Rejection

Claims 1,2,5,6, 14-15, and 44-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Chung, Hankele and Skedelski et al and Dow Q3-6093. Applicant has stated that the use of double sided adhesive tape to attach backboards to a frame structure is old (pg 2-line 3-17). The applicant also admits that the use of double sided tape was inadequate in that it was costly and time consuming (pg 2-line 9-14). A workman in the art in view of this deficiency would have looked for other equivalent but better means of attachment in the adhesive art. The workman would have noted the art of Chung, Hankele and Skedelski et al, each of which provide similar equivalent adhesive attachment means for sporting goods. Chung discloses that the "attachment of sports articles can be secured by suitable and conventional means" which include using "silicone glue" (4:29-30). Hankele discloses the use of any of the adhesives known in the art, such as "epoxy or silicone adhesives" (2:34-37). The Skedelski et al (4792316) art discloses using a "suitable

means of attachment such as silicone adhesive (1:46-49) and using a primer to improve adhesion (1:61-64). The Skedleski et al (4955314) art also discloses the desirability of the silicon adhesive having a cushioning effect (2:60-64).

The art of Chung, Hankele and Skedleski et al clearly shows that those knowledgeable in the sporting goods adhesion art were aware of silicon adhesives and their suitability and advantages when considering cost, cushioning and superior adhesive qualities where sporting goods will be used under severe conditions, such as outdoors.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a silicone adhesive as taught by Chung, Hankele or Skedleski et al in order to lower production costs and manufacture a more durable backboard in order to increase the player's satisfaction with the product. Also it would have been obvious to one of ordinary skill in the art to have sought and selected the most suitable adhesive from among the equivalent silicone adhesives available at the time of the invention including Dow Q3-6093 by the routine optimization expected by one of skill in the art (In re Leshin, 227 F2d197, 125 USPQ 416(CCPA 1960)). It should also be noted that no unexpected or extraordinary results were obtained by applicant in using the silicone adhesive. The applicant was merely following the recommended procedure for using the adhesive.

As to claim 44: See claim 1 rejection. The placement of the adhesive between the rear of the backboard and the backboard frame would naturally occur in order to hold the backboard to the frame.

As to claims 45, 47, 49, 51, 53: See claim 1 rejection. Applicant's admitted prior art demonstrates that the use of acrylic for backboards is well known in the art. . It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected any one of several equivalent materials for the backboard including acrylic based on cost, marketing and design considerations.

As to claims 46, 48, 50, 52: As well as understood, see claim 1 rejection. It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected any one of several equivalent adhesive means based on cost and design considerations. Also it would have been obvious to one of ordinary skill in the art to have sought and selected the most suitable adhesive from among the equivalent adhesives available at the time of the invention by the routine optimization expected by one of skill in the art (In re Leshin, 227 F2d197,125 USPQ 416(CCPA 1960)).

As to claim 2: The use of bond gap spacers is well known in the adhesive art (No criticality is seen in the bond gap claimed. It would have been obvious to one of ordinary skill in the art of adhesives to have selected an appropriate thickness of and amount of adhesive according to manufacturer's use suggestions in order to insure the backboard remained attached during play. No extraordinary/unanticipated results are observed from using these ranges.

As to claims 5, 6, 14 and 15: It not apparent that there is any criticality in the type of silicon adhesive used. It would have been obvious to one of ordinary skill in the art to have

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sought and selected the most suitable adhesive from among the equivalent silicone adhesives available including Dow Q3-6093 by the routine optimization expected by one of skill in the art. One of ordinary skill would have followed the manufacture's recommended usage and curing times to insure an adequate bond was made.

As to claim 5: Dow Corning Data sheet (Q3-6093) discloses a similar set time. Dow Corning Data sheet (Q3-6093) discloses that the working time and snap time are 15 minutes and 25 minutes respectively for a cure ratio of 10:1. The datasheet discloses the curing and set times are adjustable based on the amount of curing agent used (Fig 1-pg 2). A cure ratio of 8:1 would provide a working time and snap time of 9 and 15 minutes respectively ($15/25=0.6$ $15*0.6=9$). One of ordinary skill in the art would have followed the manufacture's suggested application rules to insure a satisfactory bond.

As to claims 6 and 15: Dow Corning Data sheet (Q3-6093) discloses a similar set time. Dow Corning Data sheet (Q3-6093) discloses a set time of 15-60 minutes (Fig 1-pg 2). It would have been obvious to one of ordinary skill in the art to have followed the manufacturer's suggested application directions to insure a satisfactory bond.

Claims 7-10 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1 and 14 in view of Official Notice. Official Notice was taken in the prior office action that the use of glass bead spacers is well known in the adhesive art (Spheriglass webpage+ adhesion society lit review abstract). It would have

been obvious to one of ordinary skill in the art at the time of the invention to have employed glass beads with the device in order to maintain the proper adhesive thickness in order to insure there was proper bonding between the backboard and the frame.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 in view of Official Notice. Official Notice was taken in the prior office action that the use of painted metal frames is well known in the basketball goal art. It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed a painted metal frame in order to provide a low cost structure that was attractive in order to increase sales.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 in view of Official Notice. Official Notice was taken in the prior office action that the use of printed images on the backboard is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed a printed image on the backboard to insure the proper position was maintained during the bonding operation in order to reduce the number of defective and misaligned backboards and lower total production costs.

Also,

Claims 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Ichemco. Applicant has stated that the use of double sided adhesive tape to attach backboards to a frame structure is old (pg 2-line 3-17). Ichemco discloses a silicone adhesive (page 1). It would have been obvious to

one of ordinary skill in the art to have selected any one of several equivalent adhesives, including the Ichemco silicon adhesive base on cost and design considerations. The mere selection of a well known adhesive and following the vendor's use instruction does not constitute a novel and patentable feature.

As to claim 52: See claim 50 rejection.

As to claims 51 and 53: See claim 50 rejection. Applicant's admitted prior art demonstrates that the use of acrylic for backboards is well known in the art. . It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected any one of several equivalent materials for the backboard including acrylic based on cost, marketing and design considerations.

(10) Response to Argument

Issue: Did the Examiner fail to establish a prima facie case of obviousness of independent Claims 1, 14, 44, 46, 48, 50 and 52 where there is no evidence of any teaching, suggestion, motivation or other reason why a person of ordinary skill would have combined the references to arrive at the claimed invention?

The issues that the applicant claims were decided in the prior board action were made without the benefit of the KSR decision and therefore focus the prior board decision focuses primarily on TSM obviousness reasoning. The Supreme Court noted in KSR that this is but one of several valid lines for obviousness reasoning. While not agreeing to the applicant's claim that utilizing TSM rational the rejection is invalid, there

are at least two other avenues available based on the KSR decision for sustaining the rejections.

I- Combining prior art elements according to known methods to yield predictable results.

The applicant admits that the use of various attachment means was old in the art and one successful resolution of the problem is the use of "double sided adhesive tape" but that this was a costly labor intensive operation (Specification page 2).

One successful resolution of this problem has been the use of two-sided tape having a foam center.

A significant problem with the use of the two-sided tape described above is the time and labor required to apply the tape to the frame.

If the applicant had this problem, other artisans of equal ordinary skill in the art would naturally also be having a problem in this area with regards to the cost of attaching the backboard to the support pole and would be looking at various obvious alternatives to lower the cost and production time required to assemble the article. The use of silicon adhesives in the sport's art is well known as shown by Chung, Hankele or Skedleski. The applicant's argument that this is not analogous art is not found persuasive. Various attachment means can be used throughout a class of sport equipment and would be common knowledge to one of ordinary skill in the adhesive art. If it works on a ball or a surfboard to secure two items, the artisan would conclude it might work on securing a backboard to its frame. The applicant has not modified the application of the adhesive beyond following normal installation instructions provided by

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the manufacturer. The applicant admits that the use of silicon adhesives is a lower cost alternative to the method of utilizing foam tape (Declaration of Jerry Ward- 9/17/01). (Given this factual statement, it is also unclear why the applicant argues later in the brief that the examiner "supposes" the attachment means is a cost savings measure.)

Lifetime

Products saves approximately \$3 per backboard in materials costs for each acrylic backboard fabricated using catalyzed elastomeric adhesive instead of conventional two-sided tape.

One of ordinary skill in the art would always be open to reducing manufacturing costs and may have been looking to apply various equivalent attachment means in order to lower the cost of manufacturing. The application of a catalyzed elastomeric adhesive utilizing its normal application directions would be obvious to one of ordinary skill in the art since they are merely applying a known technique to a known device and obtaining a predictable result.

II- Applying a known technique to a known device to obtain a predictable result.

Once again, the technique of applying a catalyzed elastomeric adhesive to two dissimilar materials is not novel. The applicant admits that there is a need for some flexibility in the adhesive bond between the backboard and the frame (Specification page 1).

First,

the backboard must be adequately bonded to a support frame.

Second, there must be sufficient flexibility in the bond to dissipate the impact energy from the backboard to the frame.

One of ordinary skill in the adhesive art would look to various equivalent adhesives with this feature when looking for alternative attachment means. As noted in

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the Dow Corning Q3-6093 datasheet (page 1) the adhesive has a "flexible rubber form" when cured and is used for high technology bonding:

DOW CORNING® Q3-6093 SILICONE ADHESIVE	
Type	Two-part silicone elastomer
Physical Form as supplied	Flowable liquid
as cured	Flexible rubber
Special Properties	Variable cure rate with excellent unpromised adhesion; high modulus; good deep-section cure
Primary Use	Adhesive-resistant for a variety of high technology bonding, sealing and encapsulating applications

The applicant is applying a known technique (following manufactures instructions) to a known device (basketball backboard and frame). This according to KSR is evidence of prima facie obviousness and therefore is not patentable.

Although the applicant argues in the brief (pg 18),

Importantly, the Examiner also does not provide any evidence that the adhesive of the Dow Corning Data Sheet Q3-6093 would provide the required cushioning between the acrylic backboard and frame, or sufficient adhesion and flexibility to bond the acrylic backboard and frame to allow the backboard assembly to play the game of basketball.

Common sense would indicate that one of ordinary skill in the art would be motivated to try various adhesives that provide similar cushioning effects at a lower cost. It should also be noted that while the applicant seems to not see the relevance of citing the Dow Corning Data Sheet Q3-6093, the applicant provided the document in the 1449 submission of 4/26/99. Apparently it is relevant enough to cite in a 1449 to avoid any problems with future litigation but not relevant enough to acknowledge it is an equivalent adhesive substitute for attaching the backboard to the frame during prosecution of the application.

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It should also be noted that the amended appeal brief states various comments cited in the prior art as "cast in stone" facts, when in fact they are not supported by the actual documents or "common sense" as the applicant's representative is so fond of saying. For example:

The claim is made on page 16 of the brief:

If the backboard was dislodged from the frame, it could break and an obvious safety concern was created. Common sense also dictated that the foam center of the double-sided tape was required between the backboard and frame because acrylic is a rather brittle material that can fracture or shatter relatively easily. **The foam center was required to dissipate energy or forces applied to the backboard**, such as when a basketball strikes the backboard or when dunking a basketball, and prevent the backboard from breaking or cracking due to these forces. In order to provide the required cushioning, adhesion and flexibility, **common sense said the double-sided tape with a foam center was required** between the brittle acrylic backboard and frame.

It should be noted that the Hyning et al reference (5839982) merely makes note of a typical backboard using adhesive tape. It in no way conveys that this is the only way to attach a backboard and frame, in fact; it opts for a mechanical attachment means instead of an adhesive attachment means. This would seem to indicate in actual fact that Hyning teaches away from using an adhesive attachment means while the existing brief appears to imply that Hyning teaches towards using the adhesive tape attachment means exclusively (see footnote 38, page 16 of the brief).

In **one known prior backboard developed by the assignee of this application**, the backboard frame comprises four substantially straight extruded aluminum members. **The frame members are aligned to wrap around the edge of the backboard** with the flanges extending along opposing sides of the backboard and the extruded members connected to the corner members by a fastener.

FIG. 1 **schematically illustrates another known basketball backboard construction**, which includes a welded steel frame 1 having diagonal supports 2 and a substantially planar acrylic sheet 3. As shown in the simplified side view of FIG. 2, which obviously is not to scale, a rectangular acrylic sheet 3 is attached to frame 1 by a **double-sided adhesive layer 5**. The sheet 3 has an outer perimeter edge 3a, which is completely exposed at all four sides of the sheet.

This type of frame construction suffers from more drawbacks and disadvantages than the aluminum extruded backboard described above. Most notably, is the use of **adhesive material, which may not be strong enough** to retain the acrylic sheet against the frame for an extended period. Thus, the rebound member may not be sufficiently supported by the backboard frame, thereby decreasing rebounding performance.

The current brief notes on page 18 that

Tellingly, the Examiner **provided no evidence that, prior to Applicant's invention**; one of ordinary skill in the art would have considered conventional double-sided tape systems deficient.

As noted above Hyning in 1996 considered adhesive taped backboards to be deficient and sought remedy with a mechanically fastened backboard. Assuming the applicant read the Hyning reference cited by the examiner in 2000, he would have been aware of Hyning's comments. Therefore the facts as stated in the brief are incorrect.

III With regard to the claim of secondary considerations and copying by others:

The applicant's representative has continually made the argument that the mere fact of the applicant utilizing either the Dow Corning Q3-6093 adhesive and General Electric D1-SEA 210 adhesive according to the manufacture's recommended installation instructions should be grounds for granting a patent. This is not found credible. The applicant appears to believe one of ordinary skill should simply wear blinders and not be aware of various new attachment means when they become available. The first sale date for these adhesive items is not known (A Google search and www.archive.org search failed to turn up any usable dates with regards to when these adhesives were first available to the public.)

But using "common sense" one might be able to determine a general time frame for these adhesive products. Now one might ask why this is relevant ? It is a given that one of ordinary skill in the art would be always be looking to improve the device based on current knowledge. And would be open to trying new adhesives on existing products

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as they became available in order to either lower cost or improve customer satisfaction by providing a better device. The argument has been made that as a secondary consideration a competitor was infringing on the applicant's instant invention. While the applicant has argued that this is proof that the instant invention is patentable, the examiner does not agree.

The existing application has a priority date of January 11, 1999. Looking at the product data sheets of the submitted IDS, one sees the following:

01/21/98 TIME 04:12 FAX 1510463722 GENERAL ELECTRIC CO. 0002

GE Silicones

Preliminary Product Data Sheet
D1-SEA 210 Silicone Elastomeric Adhesive

PRODUCT DESCRIPTION

GE Silicones D1-SEA 210 is a two-component, silicone elastomeric adhesive which offers fast, snap-section cure. Formed, it is a thixotropic paste. This paste quickly cures to a durable and resilient silicone rubber at room temperature with preliminary adhesion to many substrates.

The thixotropic paste consistency of D1-SEA 210 makes it appropriate for application to vertical and overhead surfaces. This consistency also facilitates fastening small parts in place while the adhesive cures.

KEY PERFORMANCE PROPERTIES

- Fast room temperature cure
- Two-component for controlled cure rate and snap-section cure
- Proven adhesion to many substrates
- Low odor
- Non-corrosive to metals
- Low temperature flexibility
- High temperature performance
- Excellent weatherability, ozone, and chemical resistance
- Excellent electrical insulation properties

Mixed Properties	D1-SEA 210
Parts by weight D1-SEA 210A to Parts by weight D1-SEA 210B or D1-SEA 210S	1:09.8
Initial Application Rate, grams/ft	120
Tack-Free Time, minutes	25
Use Time, minutes	35

Cured Properties (9)

Color: D1-SEA210A/D1-SEA210B: Grey
D1-SEA210A/D1-SEA210S: Black

Mechanical:

Hardness, Shore A	37
Tensile Strength, kg/cm ² (psi)	20.7 (295)
Elongation, %	705
Shear Strength, kg/cm ² (psi)	13.7 (195)

Thermal:

Continuous temperature	-65°C to 125°C
Operating range, °C (°F)	(-50°F to 260°F)

Approximately 9 months prior to filing this application (4/21/98), the applicant obtained a Preliminary Product Data Sheet on one company's Silicon Adhesive. Using the "Common Sense" factor, one of ordinary skill would assume the adhesive was fairly new to the marketplace and therefore not available for testing until then. Rather than being proof that a competitor was copying the instant invention, it may well be the case

that through the same normal trial and error method used by the applicant, the competitor was also trying out this “new” adhesive for its cost and adhesion benefits.

It remains the examiner’s position that while there may be some novelty in the attachment means between the backboard and the frame. It does not pass the obviousness bar for the reasons disclosed above. Also the existing claim language broadly claims an entire species of adhesives (See claim 50) that would be prevented from being used by other artisans in the art in the manner prescribed by the manufacturer of the adhesive. This failure to properly view the abilities of one of ordinary skill in the art was addressed by the CAFC in 1985. The examiner believes the CAFC comments provide additional insight as to the skill level of one of ordinary skill in the art and offer them as a final comment as to the skill level of ordinary artisans in the art for using an adhesive in the manner prescribed by the manufacturers.

In re Sovish, Moisson, and Selleslags (CAFC 226 USPQ 771 July 26, 1985, 85-781) the court found the argument that the propriety of combining the references was proper for one skilled in the art: The CAFC further noted in its decision on the plaintiff’s claim of impropriety in combining references **“This argument presumes stupidity rather than skill. The decision of the board is affirmed”**

So too, it would have been obvious to one of ordinary skill in the art to have combined the references as noted above.

(11) Related Proceeding(s) Appendix

The statement of related proceedings contained in the brief is correct.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Michael Chambers/
Conferees

/Gene Kim/

Supervisory Patent Examiner, Art Unit 3711

/XUAN M. THAI/

Supervisory Patent Examiner, Art Unit 3714
